

CF Health Matters



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What You Should Know about CF-Related Diabetes

What is CF-related Diabetes?

CF-related diabetes is thought to be caused by damage to the pancreas. Thick mucous clogs the tubes in your pancreas making it hard for it to function.

The pancreas is an organ that has two main jobs. The first is to make and secrete a hormone called insulin, and the second is to make and secrete enzymes and other digestive juices.

As people with Cystic Fibrosis are living longer, the number of people who have diabetes is increasing. It seems to be a problem that affects people with CF who are above the age of ten. The type of diabetes that develops as a result of CF is different from other types of diabetes. When you hear about general “diabetes”, please remember that its treatment is very different from the type of diabetes you can get when you have CF.

Common Symptoms of Diabetes before diagnosis or treatment include:

- very thirsty
- weight loss
- urinate often
- very hungry
- lack of energy
- unexplained decrease in lung function

Be aware that many people with CF may not know they have diabetes because many of these signs can also be related to illness and lung disease.

Why is it important to treat CFRD?

If the symptoms of CFRD are left untreated, it can lead to problems with your CF including:

- thick mucus that is difficult to clear
- trouble keeping a healthy weight
- muscle loss
- less able to fight infection
- high blood sugar over time may damage blood vessels in your eyes and kidneys which can lead to blindness or kidney failure.

Tests Which May Be Used to Diagnose CFRD

Random Blood Glucose

Measures your blood sugar at any time of the day whether or not a meal or snack has been eaten.

Fasting Blood Glucose

Measures your blood sugar after you have not had any food or drink for at least 10 hours.

Oral Glucose Tolerance Test (OGTT)

Your blood sugars will be measured hourly for two to three hours after you drink a sugary liquid. It is recommended that this test be done on a regular basis for people with CF. Speak to your CF team if you haven't had your OGTT.

There are multiple ways CFRD can be diagnosed. These include:

- A fasting blood sugar greater than 7mmol/L on two or more occasions.
- A random glucose greater than 11.1 on two or more occasions, with signs of diabetes.
- A two hour glucose level greater than 11.1 during an oral glucose tolerance test.

What You Should Know about CF-Related Diabetes

We still want you to eat high calorie, high-fat foods and we don't want you to cut back on the number of calories you eat each day.

If I have CF-related Diabetes, what am I going to do?

At first, the medical team will probably want you to monitor your blood sugars at different times during the day. This will be an important tool to help them decide how to best manage your CF-related Diabetes.

The treatment varies between CF centers and is changing with new research. Many people with CF-related diabetes require insulin injections one or more times per day. Your CF doctors will consult a diabetes specialist for their expertise in this area.

Do you remember that CF-related diabetes is caused by damage to the pancreas? Some worry that certain foods can harm your pancreas and cause damage. This is untrue; there are no foods that can damage the pancreas. The CF-related diabetes “diet” is different than the diet recommended to people who have other types of diabetes. We still want you to eat high calorie, high fat foods and we don’t want you to cut back on the number of calories you have each day. Depending on your health, we may ask you to limit the amount of “simple sugar” foods you eat or drink such as soft drinks or candies.

Some people with CF-related diabetes learn to count carbohydrates, which means they learn to figure out how much sugar and starch they are eating. This helps them decide how much insulin they need to take with each meal. Other people follow “plans” and eat regular amounts and types of foods at the same time each day so that they can take the same amount of insulin each day. Your CF team will help you choose what care plan is best for you.

If you have never been tested for diabetes, or it has been a long time since you were last tested call your CF team. They can provide you with up to date information about CF related diabetes and